

# BAM-1020 Audit Sheet

Model: **BAM-1020**

Serial Number: **72/292**

Audit Date: **4/3/17**

Audited By: **M. Potter**

| Flow Audits                        |                        |                          |                                  |
|------------------------------------|------------------------|--------------------------|----------------------------------|
| Flow Reference Standard Used:      | Model: <b>DeltaCal</b> | Serial No: <b>146294</b> | Calibration Date: <b>1/16/16</b> |
| Temperature Standard Used:         | Model:                 | Serial No:               | Calibration Date:                |
| Barometric Pressure Standard Used: | Model:                 | Serial No:               | Calibration Date:                |

Leak Check Value: as found: **0.7** lpm

as left: **0.5** lpm

Ambient Temperature:

as found: **16.7** C

as left: **17.4** C

N/A ☐

Barometric Pressure:

as found: **733** mmHg

as left: **732.0** mmHg

N/A ☐

Flow Rate (Actual Volumetric):

as found: **16.7** lpm

as left: **16.75** lpm

N/A ☐

Flow Rate (EPA Standard):

as found: **slpm**

as left: **slpm**

N/A ☐

## Mechanical Audits

|                                |          |                                     |         |                                     |
|--------------------------------|----------|-------------------------------------|---------|-------------------------------------|
| Pump muffler unclogged:        | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |
| Sample nozzle clean:           | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |
| Tape support vane clean:       | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |
| Capstan shaft clean:           | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |
| Rubber pinch rollers clean:    | as found | <input checked="" type="checkbox"/> | as left | <input checked="" type="checkbox"/> |
| Chassis ground wire installed: | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |

|                                  |          |                                     |         |                                     |   |
|----------------------------------|----------|-------------------------------------|---------|-------------------------------------|---|
| PM10 particle trap clean:        | as found | <input type="checkbox"/>            | as left | <input checked="" type="checkbox"/> | N/A <input type="checkbox"/>            |
| PM10 drip jar empty:             | as found | <input type="checkbox"/>            | as left | <input checked="" type="checkbox"/> | N/A <input type="checkbox"/>            |
| PM10 bug screen clear:           | as found | <input type="checkbox"/>            | as left | <input checked="" type="checkbox"/> | N/A <input type="checkbox"/>            |
| PM2.5 particle trap clean:       | as found | <input type="checkbox"/>            | as left | <input checked="" type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| Inlet tube water-tight seal OK:  | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |   |
| Inlet tube perpendicular to BAM: | as found | <input checked="" type="checkbox"/> | as left | <input type="checkbox"/>            |   |

| Analog Voltage Output Audit |                    |                      | N/A <input type="checkbox"/> |
|-----------------------------|--------------------|----------------------|------------------------------|
| DAC Test Screen             | BAM Voltage Output | Logger Voltage Input |                              |
| 0.000 Volts                 | Volts              | Volts                |                              |
| 0.500 Volts                 | Volts              | Volts                |                              |
| 1.000 Volts                 | Volts              | Volts                |                              |

| Membrane Audit   |  |
|------------------|--|
| LAST m (mg):     |  |
| ABS (mg):        |  |
| Difference (mg): |  |
| % Difference:    |  |

| Flow Control Range |          |
|--------------------|----------|
| Flow Setpoint      | BAM Flow |
| 15.0 LPM           |          |
| 16.7 LPM           |          |
| 18.4 LPM           |          |

| Setup and Calibration Values |          |       |           |          |       |                  |          |       |
|------------------------------|----------|-------|-----------|----------|-------|------------------|----------|-------|
| Parameter                    | Expected | Found | Parameter | Expected | Found | Parameter        | Expected | Found |
| Clock Time/Date              |          |       | FLOW TYPE |          |       | AP               |          |       |
| RS232 baud                   |          |       | Cv        |          |       | FRI              |          |       |
| STATION #                    |          |       | Qo        |          |       | FRh              |          |       |
| RANGE                        |          |       | ABS       |          |       | Password         |          |       |
| BAM SAMPLE                   |          |       | μ sw      |          |       | Cycle Mode       |          |       |
| MET SAMPLE                   |          |       | K Factor  |          |       | RH Control       |          |       |
| OFFSET                       |          |       | BKGD      |          |       | RH Setpoint      |          |       |
| CONC UNITS                   |          |       | STD TEMP  |          |       | Datalog RH       |          |       |
| COUNT TIME                   |          |       | HEATER    |          |       | Delta-T Control  |          |       |
| FLOW RATE                    |          |       | e1        |          |       | Delta-T Setpoint |          |       |
| CONC TYPE                    |          |       | Errors    |          |       | Datalog Delta-T  |          |       |

| Last 6 Errors in BAM-1020 Error Log |        |       |               |        |       |
|-------------------------------------|--------|-------|---------------|--------|-------|
| Error                               | Date   | Time  | Error         | Date   | Time  |
| 1 Maintenance                       | 4/3/17 | 14:19 | 4 Maintenance | 2/1/17 | 11:37 |
| 2 Maintenance                       | 3/2/17 | 1:37  | 5 Maintenance | 1/3/17 | 9:40  |
| 3 Maintenance                       | 2/1/17 | 11:56 | 6 Maintenance | 1/3/17 | 9:23  |

Audit Notes: **Tape Test Passed 2x** **Clock checked** **Data Downloaded**  
**Running on arrival; Running on departure**  
**Weather station running on arrival & departure**